INTERNATIONAL SEARCH REPORT

International application No. PCT/KR2005/000036

CLASSIFICATION OF SUBJECT MATTER

IPC7 H01L 33/00

According to International Patent Classification (IPC) or to both national classification and IPC

FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 HOIL HOIS

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for inventions since 1975

Korean Utility models and applictions for Utility models since 1975

Japanese Utility models and application for Utility models since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used) e-KIPASS; "LED", "REFLECT", "ELECTRODE", "UNEVEN", "ROUGH"

DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	US 2001/0048113 A1 (TAEK KIM) 6 DECEMBER 2001 see the abstract, figures 1-9, claim 1	1-6 7-16
Y A	US 6504180 B1 (IMEC VZW AND VRIJE UNIVERSITEIT) 7 JANUARY 2003 see the abstract, column 16 line 15 - line 37, figure 12	1-6 7-16
Α	US 2003/0062530 A1 (KABUSHIKI KAISHA TOSHIBA) 3 APRIL 2003 see the abstract, paragraph [0087], claims 1-24, figures 1-9	1-16
E ,Y E, A	KR 2005-0003671 A (EPIVALLEY CO., LTD.) 12 JANUARY 2005 see the abstract, figure 5	1-6 7-16

Further documents are listed in the continuation of Box C.	See patent family annex.		
Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date **The content of the property of the prope	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive		
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search	Date of mailing of the international search report		
15 APRIL 2005 (15.04.2005)	15 APRIL 2005 (15.04.2005)		
Name and mailing address of the ISA/KR	Authorized officer		
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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